RESULTS: Usable response rate was 37% (n = 363). Mean A1C was 7.2 (SD 1.4), mean diabetes duration was 10.2 (SD 9.1) years, 62.1% were obese (BMI >30), and about 42% used insulin. Mean (SD) and range of EQ-5D index scores were: 0.71(0.21), –0.04 to 1.00 for the US; 0.60(0.32), –0.48 to 1.00 for the UK. Spearman's correlation between US and UK scores was 0.998 ($p < 0.001$). A paired samples t-test indicated that the US valuations were significantly higher ($p < 0.001$) with the mean difference being 0.11(0.11). In individual OLS regressions, those with neurological complications, ischemic heart disease, obesity or depressive symptoms had significantly higher EQ-5D US scores as well as UK scores. These conditions also significantly predicted greater differences between US and UK scores. **CONCLUSION:** Although well correlated, the U.S population means were significantly higher than UK population means, and this difference was seen across clinically relevant categories in T2DM. The preference scoring system employed may therefore influence results of research conducted using the EQ-5D instrument to measure preferences.

ENDOCRINE DISORDERS—Patient-Reported Outcomes

PEN1

ESTIMATING THE QALY BENEFITS OF TREATMENT FOR GROWTH HORMONE DEFICIENCY (GHD) IN ADULT PATIENTS: A PRECURSOR TO COST-EFFECTIVENESS ANALYSIS

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OBJECTIVES: Regulatory agencies demand QALYs as evidence of effectiveness in economic evaluation. This is a challenge for clinical studies in which outcomes are measured using condition-specific instruments that lack the required measurement properties. This study aims to provide a model for deriving EQ-5D utilities directly from the QoL-AGHDA. These estimates were used to calculate QALY deficit and treatment effects in adults with GHD in relation to the general population values. **METHODS:** A UK postal survey captured QoL-AGHDA (a condition-specific measure for patients with GHD) and EQ-5D responses from a broadly representative sample of the general population (n = 921). These data were used to construct two-step regression model ($R^2 = 0.42$). In the first, TTO-weighted ED-$5D_{index}$ was the dependent variable and yes/no responses to all 25 QoL-AGHDA items were coded as dichotomous dummy variables (x_i). In the second step utilities were computed as follows: $\text{QoL-AGHDA}_{utility} = b_0 + c*age + \Sigma bi*x_i + e_i$. $\text{QoL-AGHDA}_{utility}$ at yearly visits for 894 UK patients followed in the KIMS database was computed using the same regression model. Subsequently the mean QALY over time were compared to baseline values and assessed in relation to the cross-sectional age/gender population values. **RESULTS:** Health related quality of life measured by $\text{QoL-AGHDA}_{utility}$ in patients prior to GH replacement differed significantly from age/gender-matched values in the general population (0.67 vs. 0.85, $p < 0.0001$). After the first year of treatment the deficit was reduced to –0.07. Despite a dramatic improvement during the first year of treatment, patients' health status remained significantly different from general population reference values ($p < 0.001$) over the course of their treatment. Nevertheless, a mean undiscounted gain from baseline of 0.32 QALYs was seen in the treated patients, corresponding to 0.08 QALYs per year. **CONCLUSION:** Estimates of treatment benefit for use in economic evaluation can be successfully derived from condition-specific measures.

MENTAL HEALTH—Clinical Outcomes Studies

PMH1

CHANGES IN COMORBIDITIES, MEDICATION USE AND TREATMENT COSTS AFTER DIAGNOSIS OF GENERALIZED ANXIETY DISORDER

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OBJECTIVES: To evaluate the impact of Generalized Anxiety Disorder (GAD) on diagnosed comorbidities, medication use and treatment costs. **METHODS:** Claims were drawn from PharMetrics Integrated Outcomes Database for 12-month prior and post the first GAD (ICD9-CM: 30002) diagnosis between Janaury 2003 and June 2004 (the diagnosis date as the index date). No GAD diagnosis 12-month prior the index date, 24-month continuous insurance eligibility and aged 18–64 were required. Changes in diagnoses of comorbidities, medication use patterns, and treatment costs between the year before and after the index date were examined. Comparison among subgroups of GAD patients with comorbid depression and pain was also investigated. Wilcoxon Signed Rank test and McNemar's test were used to examine pre-post differences for continuous and categorical variables, respectively. **RESULTS:** A total of 240,041 patients were included in this study. The mean age was 41.7 years old and 67% were female. After diagnosis of GAD, a significantly higher percent of patients were diagnosed with depression (44.4% vs. 30.9%, $p < 0.001$), dyslipidemia (24.0% vs.19.9%, $p < 0.001$), and diabetes (6.1% vs. 5.3%, $p < 0.001$) than before GAD diagnosis. The use of antidepressants increased from 42.3% to 56.8% ($p < 0.001$). Compared to the year prior to GAD diagnosis, total annual costs increased by $2034 ($p < 0.001$) driven mainly by increases of inpatient and outpatient costs ($285 and $773, $p < 0.001$, GAD only and increased merely $306 for GAD patients with depression while GAD patients with pain and those with both pain and depression increased by $2253 and $4665 (both $p < 0.001$), respectively. **CONCLUSION:** Diagnosis of GAD had significant impact on comorbidities, medication use and treatment costs. Furthermore, comorbid pain and depression had substantial extra burden on GAD patients as compared with those had GAD only. Recognizing these comorbidities is important in the treatment of patients with GAD.

PMH2

DIVALPROEX SODIUM VERSUS VALPROIC ACID: DRUG UTILIZATION PATTERNS, PERSISTENCE RATES, AND PREDICTORS OF HOSPITALIZATION AMONG VA PATIENTS DIAGNOSED WITH BIPOLAR DISORDER

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